Record Nr. UNINA9910298623803321 Coating Technology for Vehicle Applications / / edited by Sung Chul Titolo Cha, Ali Erdemir Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-14771-4 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (248 p.) 388 Disciplina 620.11 620.11223 621.89 629.2 658.26 Soggetti Tribology Corrosion and anti-corrosives Coatings Automotive engineering Transportation **Energy efficiency** Tribology, Corrosion and Coatings Automotive Engineering **Energy Efficiency** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface -- Energy consumption due to friction in motored vehicles and low-friction coatings to reduce it -- Diverse Coatings for Engine Parts -- Overview of DLC-coated engine components -- Coating Technologies for Automotive Engine Applications -- Customized coating systems for products with added value from development to high volume production -- Surface Treatments for Automotive

Applications -- Hard Coatings and Coating Processes for the

Automotive Industry -- Surface texturing for engine parts -- Coatings

Sommario/riassunto

for Aluminum Die-casting Dies -- Coatings for Forming Dies of Advanced High-Strength Steel -- Diamond-like carbon coatings with special wettability for automotive applications -- Smart surfaces for lubrication – solid lubricants and adaptive texture -- Decorative PVD coatings on Automotive Plastics -- Index.

This book describes current, competitive coating technologies for vehicles. The authors detail how these technologies impact energy efficiency in engines and with increased use of lightweight materials and by varying coatings applications can resolve wear problems, resulting in the increased lifecycle of dies and other vehicle components.